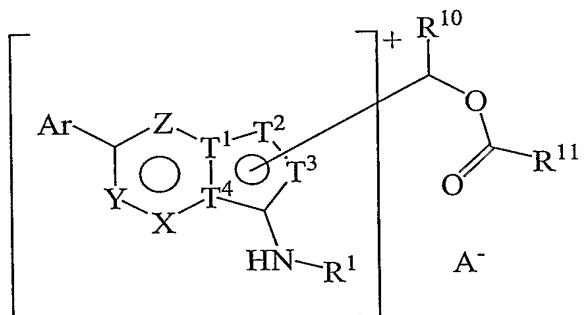


CLAIMS

1. A compound of formula (I):



5

(I)

wherein:

one of T¹ and T⁴ is N and the other is C;

one of T² and T³ is N and the other is C(CH₂)_nR² or N;

10 X, Y and Z are independently N or C(CH₂)_nR³;

R¹ is Ar¹ or R¹ is C₁₋₆alkyl optionally substituted with one or two groups Ar¹;

Ar¹ is cyclohexyl, piperidinyl, piperazinyl, morpholinyl, adamantyl, phenyl, naphthyl, a six-membered heteroaromatic ring containing one, two or three nitrogen atoms, a five-membered heteroaromatic ring containing one, two, three or four

15 heteroatoms chosen from O, N and S, at most one O or S atom being present, or a nine- or ten-membered bicyclic heteroaromatic ring in which phenyl or a six-membered heteroaromatic ring as defined above is fused to a six- or five-membered heteroaromatic ring as defined above;

Ar¹ is optionally substituted by one, two or three groups chosen from halogen, 20 hydroxy, cyano, nitro, isonitrile, CF₃, OCF₃, SF₅, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, C₁₋₆alkoxy, C₁₋₆alkylthio, C₁₋₆alkylsulfinyl, C₁₋₆alkylsulfonyl, -NR⁶R⁷, CONR⁶R⁷, -COH, -CO₂H, C₁₋₆alkylcarbonyl, C₁₋₆alkoxycarbonyl, haloC₁₋₆alkyl, haloC₂₋₆alkenyl, haloC₁₋₆alkoxy, hydroxyC₁₋₆alkyl, aminoC₁₋₆alkyl, cyanoC₁₋₆alkyl, C₃₋₆cycloalkyl, hydroxyC₃₋₆cycloalkyl, aminoC₃₋₆cycloalkyl, haloC₃₋₆cycloalkyl, cyanoC₃₋₆cycloalkyl, 25 haloC₁₋₆alkylcarbonyl, C₁₋₆alkoxycarbonylC₁₋₆alkyl, (halo)(hydroxy)C₁₋₆alkyl, (halo)(hydroxy)C₃₋₆cycloalkyl, phenyl and a five-membered heteroaromatic ring

containing one, two or three heteroatoms, at most one O or S atom being present; wherein the phenyl and five-membered heteroaromatic ring are optionally substituted by C₁₋₆alkyl, halo, hydroxy or cyano; when two C₁₋₆alkyl groups substitute adjacent positions on Ar¹ then, together with the carbon atoms to which they are attached, they 5 may form a partially saturated ring containing five or six carbon atoms; when two C₁₋₆alkoxy groups substitute adjacent positions on Ar¹ then, together with the carbon atoms to which they are attached, they may form a partially saturated five- or six-membered ring;

Ar is phenyl, a six-membered heteroaromatic ring containing one, two or three 10 nitrogen atoms or a five-membered heteroaromatic ring containing one, two, three or four heteroatoms chosen from O, N and S, at most one heteroatom being O or S, Ar being optionally substituted by one, two or three groups chosen from halogen, CF₃, OCF₃, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, nitro, cyano, isonitrile, hydroxy, C₁₋₆alkoxy, C₁₋₆alkylthio, -NR⁶R⁷, -CONR⁶R⁷, -COH, CO₂H, C₁₋₆alkoxycarbonyl, haloC₁₋₆alkyl, 15 haloC₁₋₆alkoxy, hydroxyC₁₋₆alkyl, aminoC₁₋₆alkyl, C₁₋₆alkylcarbonyl and a five-membered heteroaromatic ring containing one, two, three or four heteroatoms chosen from O, N and S, at most one heteroatom being O or S, optionally substituted by C₁₋₆alkyl, halogen, amino, hydroxy or cyano;

R² and R³ are independently hydrogen, halogen, CF₃, OCF₃, C₁₋₆alkyl, 20 C₂₋₆alkenyl, C₂₋₆alkynyl, nitro, cyano, isonitrile, hydroxy, C₁₋₆alkoxy, C₁₋₆alkylthio, -NR⁶R⁷, -CONR⁶R⁷, -COH, CO₂H, C₁₋₆alkoxycarbonyl, haloC₁₋₆alkyl, hydroxyC₁₋₆alkyl, aminoC₁₋₆alkyl, C₁₋₆alkylaminoC₁₋₆alkyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, amido, piperidinyl, piperazinyl, C₃₋₆cycloalkyl, morpholinyl, phenyl, a six-membered heteroaromatic ring containing one, two or three 25 nitrogen atoms or a five-membered heteroaromatic ring containing one, two, three or four heteroatoms chosen from O, N and S, at most one O or S atom being present, which phenyl, six-membered heteroaromatic ring and five-membered heteroaromatic ring are optionally substituted by haloC₁₋₆alkyl, C₁₋₆alkyl, hydroxy, halogen, amino or cyano;

R⁶ and R⁷ are independently hydrogen or C₁₋₆alkyl; when both R⁶ and R⁷ are C₁₋₆alkyl then, together with the nitrogen atom to which they are attached, they may form a five or six membered saturated nitrogen containing ring;

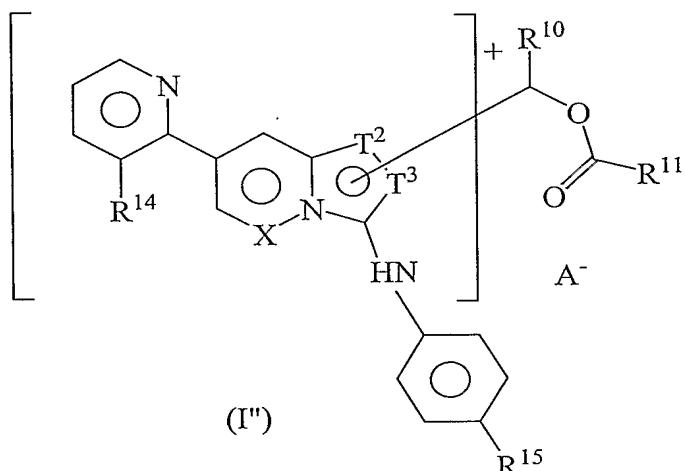
n is zero, one, two or three;

R¹⁰ and R¹¹ are independently hydrogen, C₁₋₆alkyl, C₁₋₆alkoxy, C₃₋₆cycloalkyl or NR¹²R¹³;

R¹² and R¹³ are independently hydrogen or C₁₋₆alkyl or R¹² and R¹³, together with the nitrogen atom to which they are attached, may form a nitrogen containing heterocycle; and

5 A⁻ is a pharmaceutically acceptable anion.

2. A compound according to claim 1 of formula (I''):



10

wherein:

X is CH or N;

one of T² and T³ is N and the other is C(CH₂)_nR²;

15 R² is hydrogen, halogen, CF₃, OCF₃, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, nitro, cyano, isonitrile, hydroxy, C₁₋₆alkoxy, C₁₋₆alkylthio, -NR⁶R⁷, -CONR⁶R⁷, -COH, CO₂H, C₁₋₆alkoxycarbonyl, haloC₁₋₆alkyl, hydroxyC₁₋₆alkyl, aminoC₁₋₆alkyl, C₁₋₆alkylaminoC₁₋₆alkyl, di(C₁₋₆alkyl)aminoC₁₋₆alkyl, amido, piperidinyl, piperazinyl, C₃₋₆cycloalkyl, morpholinyl, phenyl, a six-membered heteroaromatic ring containing one, two or three nitrogen atoms or a five-membered heteroaromatic ring containing one, two, three or four heteroatoms chosen from O, N and S, at most one O or S atom being present, which phenyl, six-membered heteroaromatic ring and five-membered heteroaromatic ring are optionally substituted by haloC₁₋₆alkyl, C₁₋₆alkyl, hydroxy, halogen, amino or cyano;

- 50 -

R^6 and R^7 are independently hydrogen or C_{1-6} alkyl; when both R^6 and R^7 are C_{1-6} alkyl then, together with the nitrogen atom to which they are attached, they may form a five or six membered saturated nitrogen containing ring;

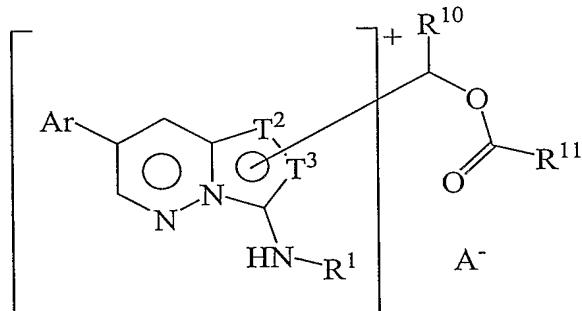
n is zero, one, two or three;

5 R^{10} and R^{11} are independently hydrogen, C_{1-6} alkyl, C_{1-6} alkoxy, C_{3-6} cycloalkyl or $NR^{12}R^{13}$ where R^{12} and R^{13} are independently hydrogen or C_{1-6} alkyl or R^{12} and R^{13} , together with the nitrogen atom to which they are attached, form a nitrogen-containing heterocycle;

10 R^{14} and R^{15} are independently C_{1-6} alkyl, CF_3 , halo C_{1-6} alkyl, halogen, C_{1-6} alkoxy, halo C_{1-6} alkoxy or OCF_3 ; and

A^- is a pharmaceutically acceptable anion.

3. A compound according to claim 1 of formula (IA):



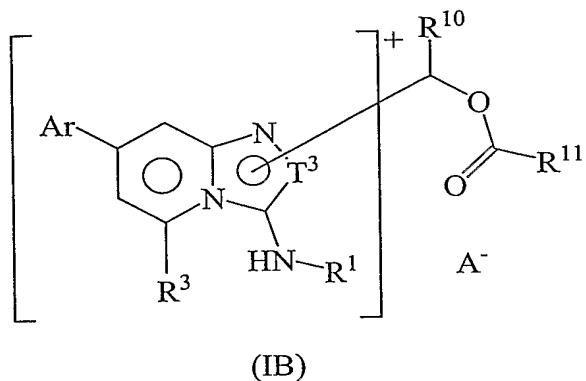
15

(IA)

wherein T^2 , T^3 , Ar , R^1 , R^{10} , R^{11} and A^- are as defined in claim 1.

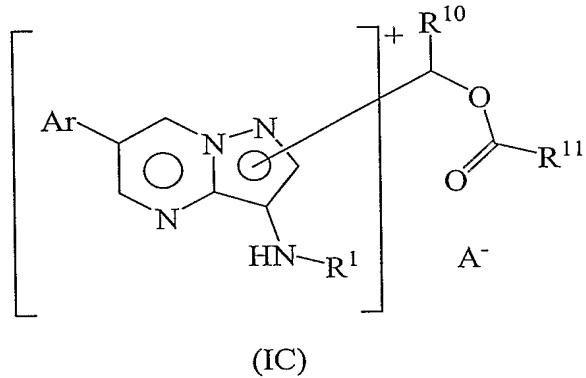
4. A compound according to claim 1 of formula (IB):

20



wherein Ar, R¹, R³, T³, R¹⁰, R¹¹ and A⁻ are as defined in claim 1.

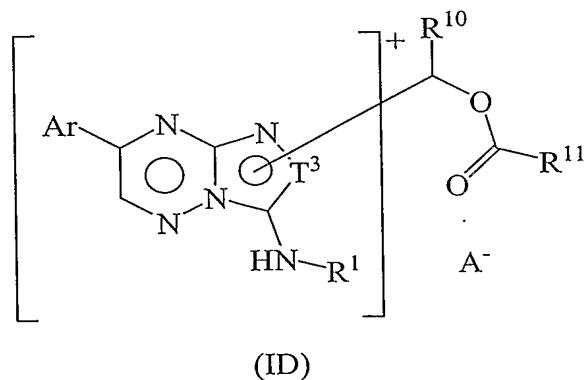
5 5. A compound according to claim 1 of formula (IC):



wherein Ar, R¹, R¹⁰, R¹¹ and A⁻ are as defined in claim 1.

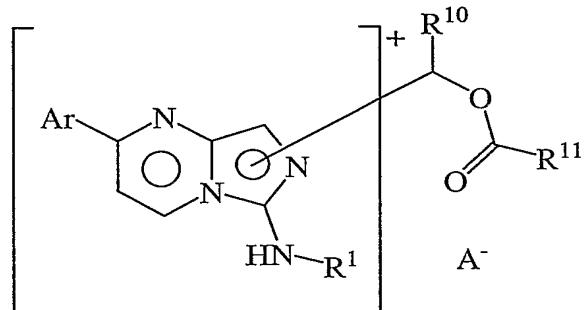
10

6. A compound according to claim 1 of formula (ID):



wherein Ar, R¹, T³, R¹⁰, R¹¹ and A⁻ are as defined in claim 1.

7. A compound according to claim 1 of formula (IE):



5

wherein Ar, R¹, R¹⁰, R¹¹ and A⁻ are as defined in claim 1.

8. A pharmaceutical composition comprising one or more compounds according
10 to any one of claims 1 to 7 in association with a pharmaceutically acceptable carrier or
excipient.

9. A compound according to any one of claims 1 to 7 for use in treatment of the
human or animal body.

15

10. A compound according to any one of claims 1 to 7 for use in the manufacture
of a medicament for the treatment or prevention of physiological disorders that may
be ameliorated by modulating VR1 activity.

20 11. A compound according to any one of claims 1 to 7 for use in the manufacture
of a medicament for the treatment or prevention of a disease or condition in which
pain and/or inflammation predominates.

25 12. A method for the treatment or prevention of physiological disorders that may
be ameliorated by modulating VR1 activity, which method comprises administration

to a patient in need thereof of an effective amount of a compound of claim 1 or a composition comprising a compound of claim 1.

13. A method for the treatment or prevention of a disease or condition in which
5 pain and/or inflammation predominates, which method comprises administration to a patient in need thereof of an effective amount of a compound of claim 1 or a composition comprising a compound of claim 1.